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CLAIMS

1.(cancelled) A wall frame structure having an enclosing framework, including a plurality of pairs of load-bearing, substantially upright strut members having intermediate longitudinal portions thereof in mutually inclined relation, contained within said framework, and subject to longitudinal compressive loading.

2.(currently amended) The ~~wall frame structure~~ structural panel unit as set forth in Claim 19, wherein said ~~individual~~ load bearing strut members are of slender section modulus, prone to individually buckle under longitudinal compressive loading of said ~~individual~~ strut members, said member pairs having their individual outer ends mutually joined, each said individual member of said pairs of members being substantially immobilized at locations intermediate their respective ends, to significantly reduce their respective tendency to deform under load .

3.(currently amended) The ~~frame structure~~ structural panel unit as set forth in Claim 2, wherein said framework side ~~-wall~~ members ~~of said frame~~ laterally constrain said strut individual members that are in contacting relation with said ~~frame side-wall~~ framework side members.

4 (currently amended) The ~~frame structure~~ structural panel unit as set forth in Claim 19, wherein upper end and lower end portions of each of said pairs of members are secured to each other, and at least one said ~~intermediate transition~~ strut member adjoined portion of a pair of said strut members is fastened in predetermined location within said framework.

5. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 19, wherein the upper and lower ends of a pair of said ~~individual~~ members are secured to each other, and attached to adjoining portions of said rectangular enclosure framework .
6. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 5, wherein said ends of a said pair of said strut ~~individual~~ members are glued to each other.
7. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 19, wherein said ~~frame-structure~~ rectangular framework enclosure includes face sheets in enclosing relation with said pairs of strut members, said pairs of strut members having edge portions thereof secured to adjoining surface portions of said face sheets.
8. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 7, wherein said strut member edge portions are glued to said adjoining surface portions of said face sheets.
9. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 2, wherein a said pair of strut ~~individual~~ members are laterally constrained at their centre by contact with adjoining pairs of said strut members .
10. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 2, wherein one said strut ~~individual~~ member is laterally constrained substantially at its centre by contact with an adjoining portion of said framework ~~frame~~ .
11. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 10, wherein said one strut ~~individual~~ member is joined to an adjoining portion of said framework ~~frame~~ by fastening means selected from the group consisting of nails, staples and glue, and combinations thereof.

12. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 19, including a laterally extending tension member securing said ~~intermediate transition portions of~~ at least some of said ~~strut individual~~ members in mutually adjoined back-to-back relation .

13. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 12, wherein said tension member is selected from the group consisting of strapping, wire and plastic filament.

14. (currently amended) The ~~frame-structure~~ structural panel unit as set forth in Claim 19, wherein said ~~strut individual~~ members are selected from the material group consisting of plywood, wood, particle board, wafer board , low, medium and high density fiberboard panels, and Hardboard, laminated panels and fiberglass, metal and plastic.

15. (currently amended) The ~~wall frame structure~~ structural panel unit as set forth in Claim 14, wherein said metal and plastic ~~strut individual~~ members have a profiled cross section with side flanges extending for at least a portion of their length, and substantially planar end and ~~centre~~ intermediate adjoined portions.

16. (currently amended) The ~~wall frame structure~~ structural panel unit as set forth in Claim 15, wherein said ~~strut individual~~ members each has at least two portions of its length with said profiled cross section.

17. (currently amended) The ~~wall frame structure~~ structural panel unit as set forth in Claim 15, wherein said ~~strut individual~~ members each has at least four portions of its length with said profiled cross section.

18. (currently amended) The ~~wall frame structure~~ structural panel unit as set forth in Claim 19, ~~said contacting intermediate transition portions of said individual members forming~~ wherein said interstices are substantially triangular and diamond shaped ~~interstices adjacent their~~

~~contacting portions; and~~ wherein plastic foam is located in contacting supporting relation with said individual members at within said interstices, in use to resist lateral deformation of said individual members when said individual members are subjected to buckling due to compressive loading of said strut members.

19. (currently amended) A ~~structural panel unit for use in building structures, consisting of an outer frame forming the walls of a~~ wall frame structure having an enclosing rectangular enclosure; framework reinforcing means comprising comprising side and end members, and a plurality of pairs of individual load-bearing strut members extending in contained relation between said framework end members, having intermediate longitudinal portions of each said strut member pair in alternating converging and diverging mutually inclined relation, to form a series of interstitial openings within said framework, wherein portions of said strut member pairs are in adjoined, mutual laterally constrained relation, and are collectively in laterally constrained relation by said framework side members, to provide shortened strut member portions of enhanced stiffness extending in connected load-bearing relation between said framework end members. ~~and members substantially uniformly distributed throughout the rectangular enclosure, the ends of said pairs of members abutting said enclosure walls; each individual member of said pairs of members having a first portion of its length inclined in mutually divergent relation from the other said individual member of said pair; each said member having an intermediate transition portion, and a second portion of its length adjoining said transition portions inclined in mutually convergent relation with the other said individual member, to form a substantially diamond shaped enclosure; said diamond shaped enclosures extending across the length and breadth of said rectangular~~

~~enclosure, being bounded by a plurality of substantially triangular shaped enclosures;~~
~~said intermediate transition portions of a plurality of said members being in contacting,~~
~~back-to-back, mutual supporting relation.~~